

FIG. 2B

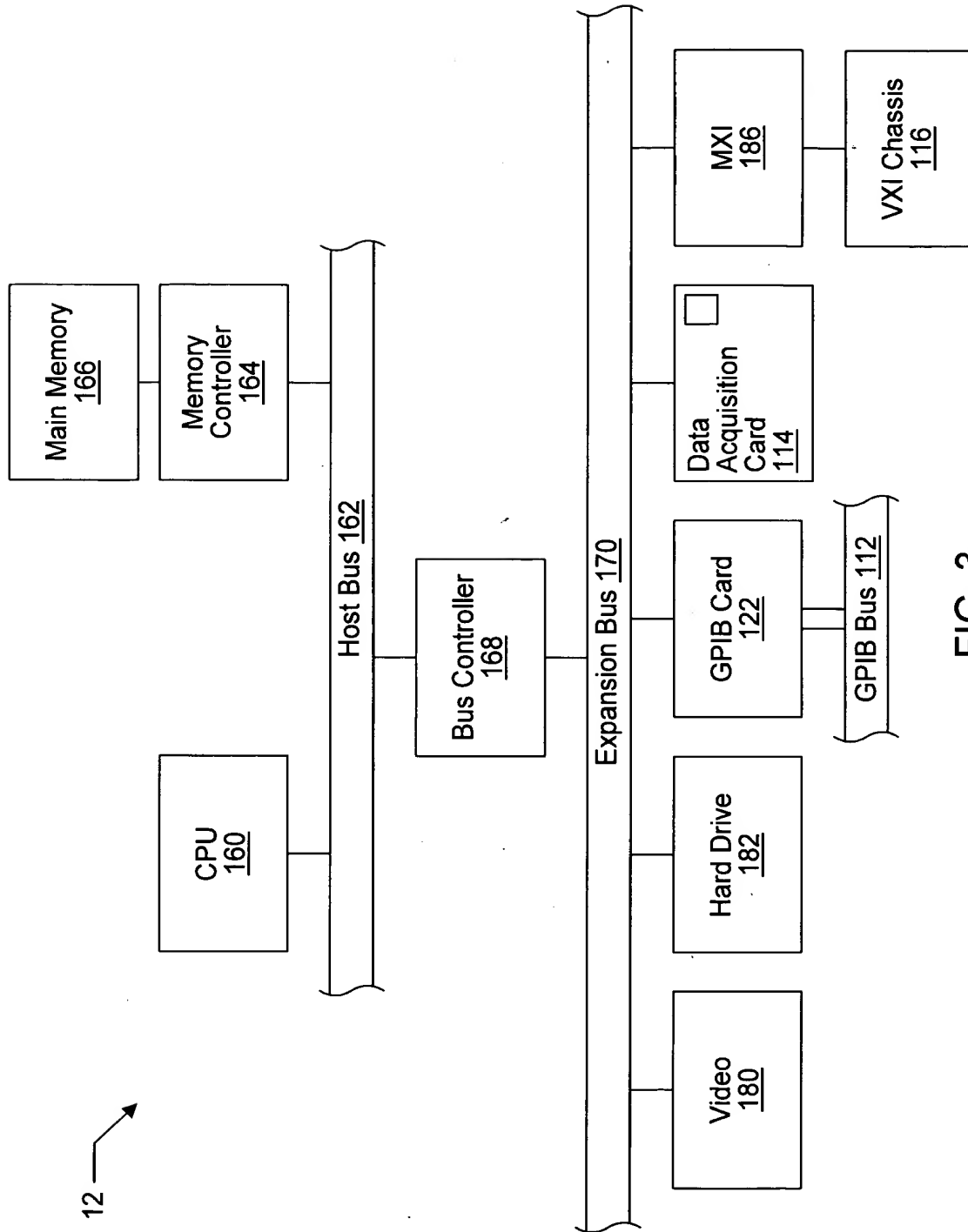
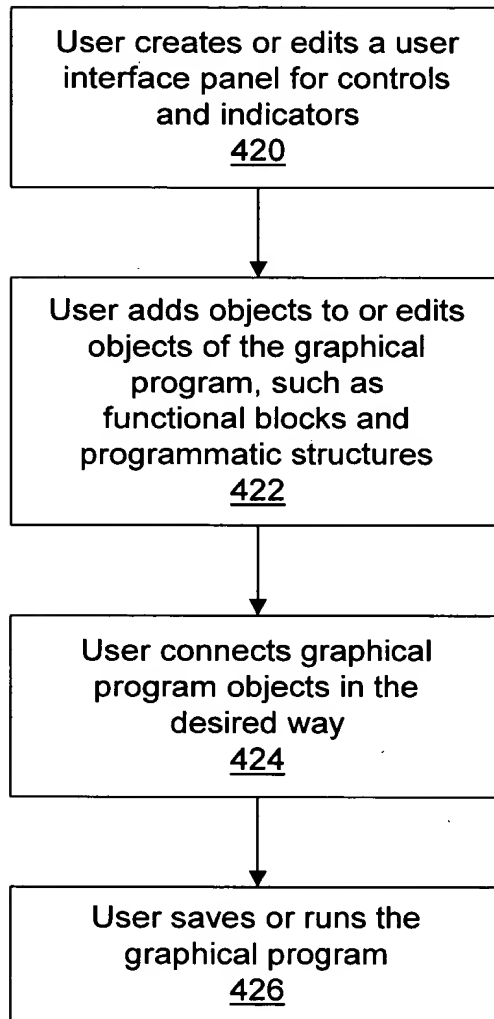


FIG. 3



**FIG. 4**  
(PRIOR ART)

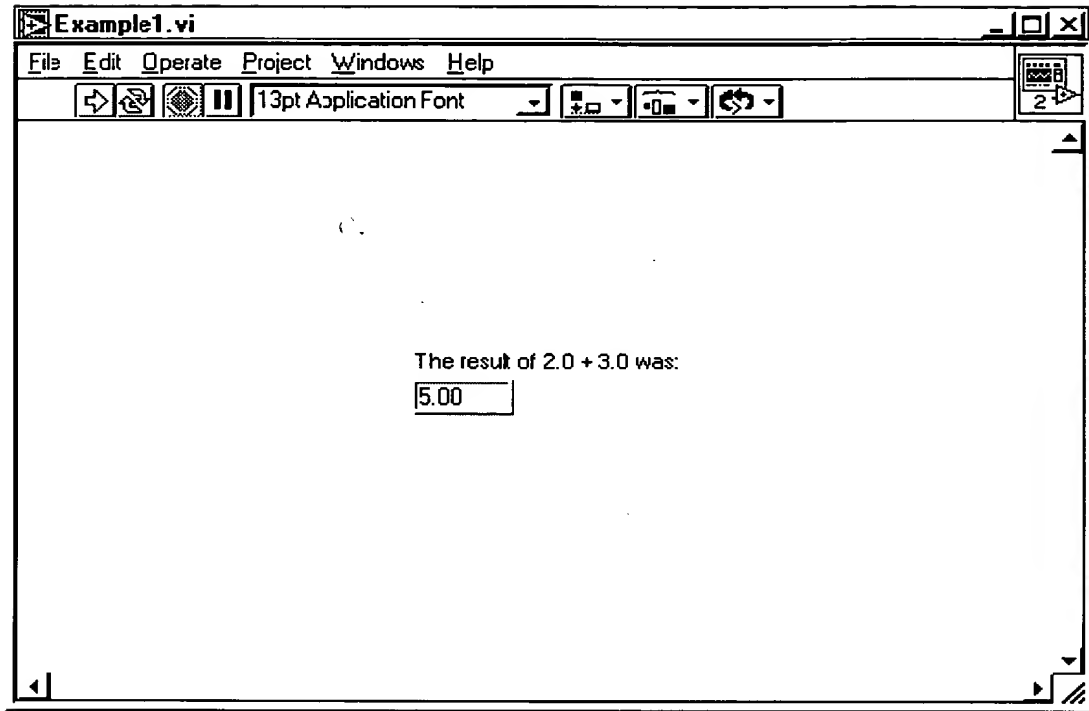


FIG. 5A  
(PRIOR ART)

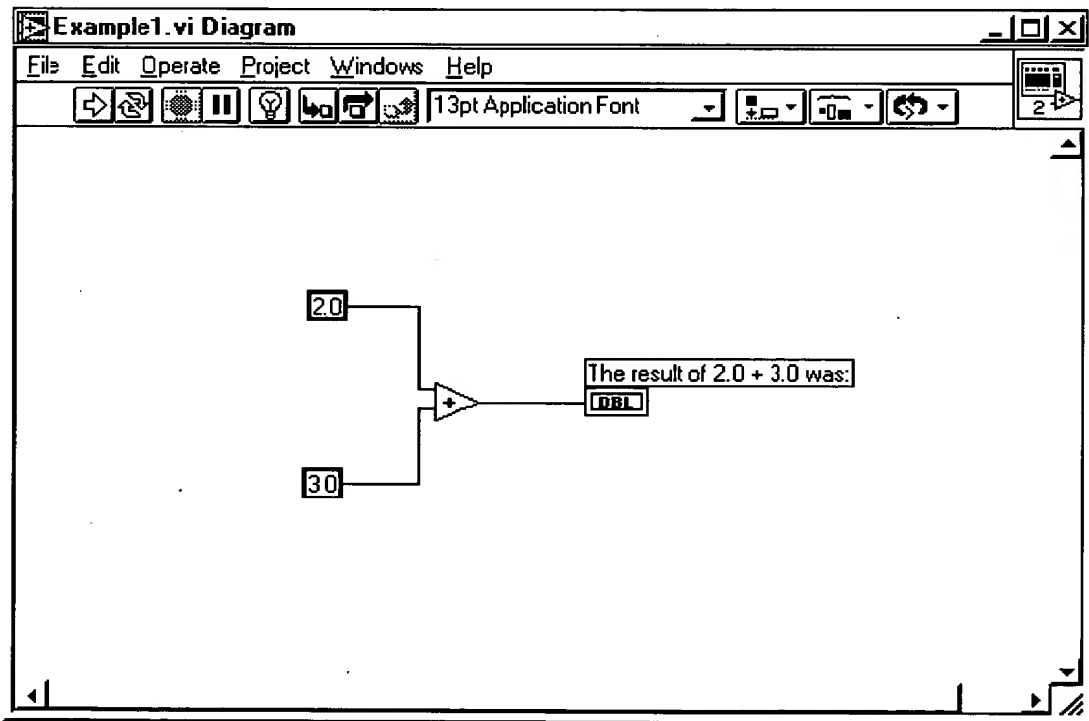


FIG. 5B  
(PRIOR ART)

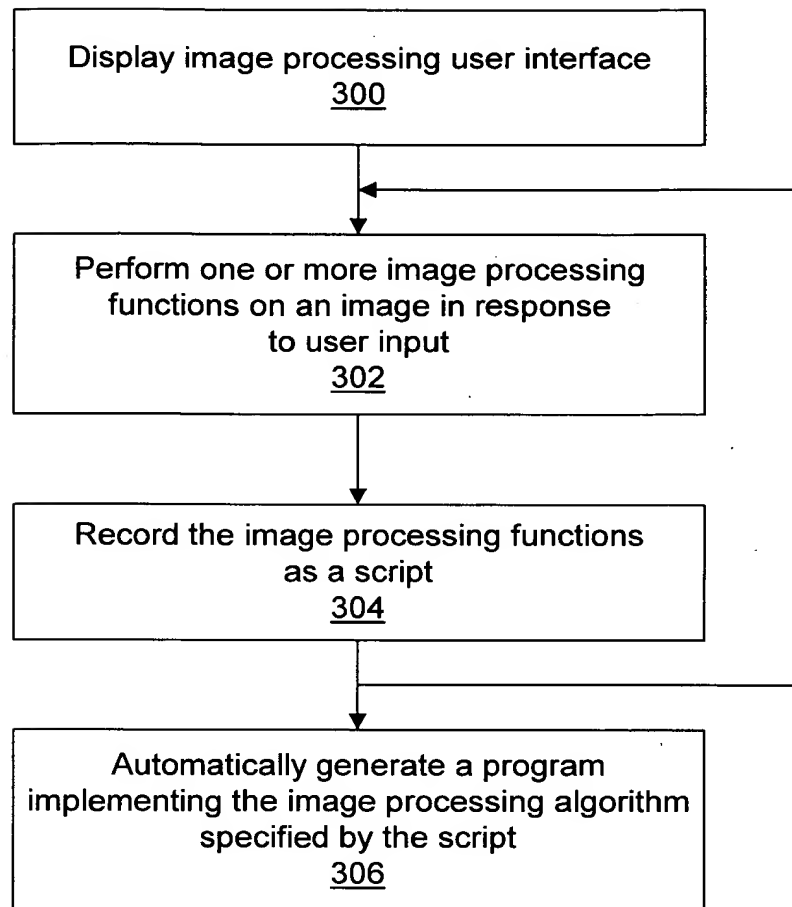


FIG. 6

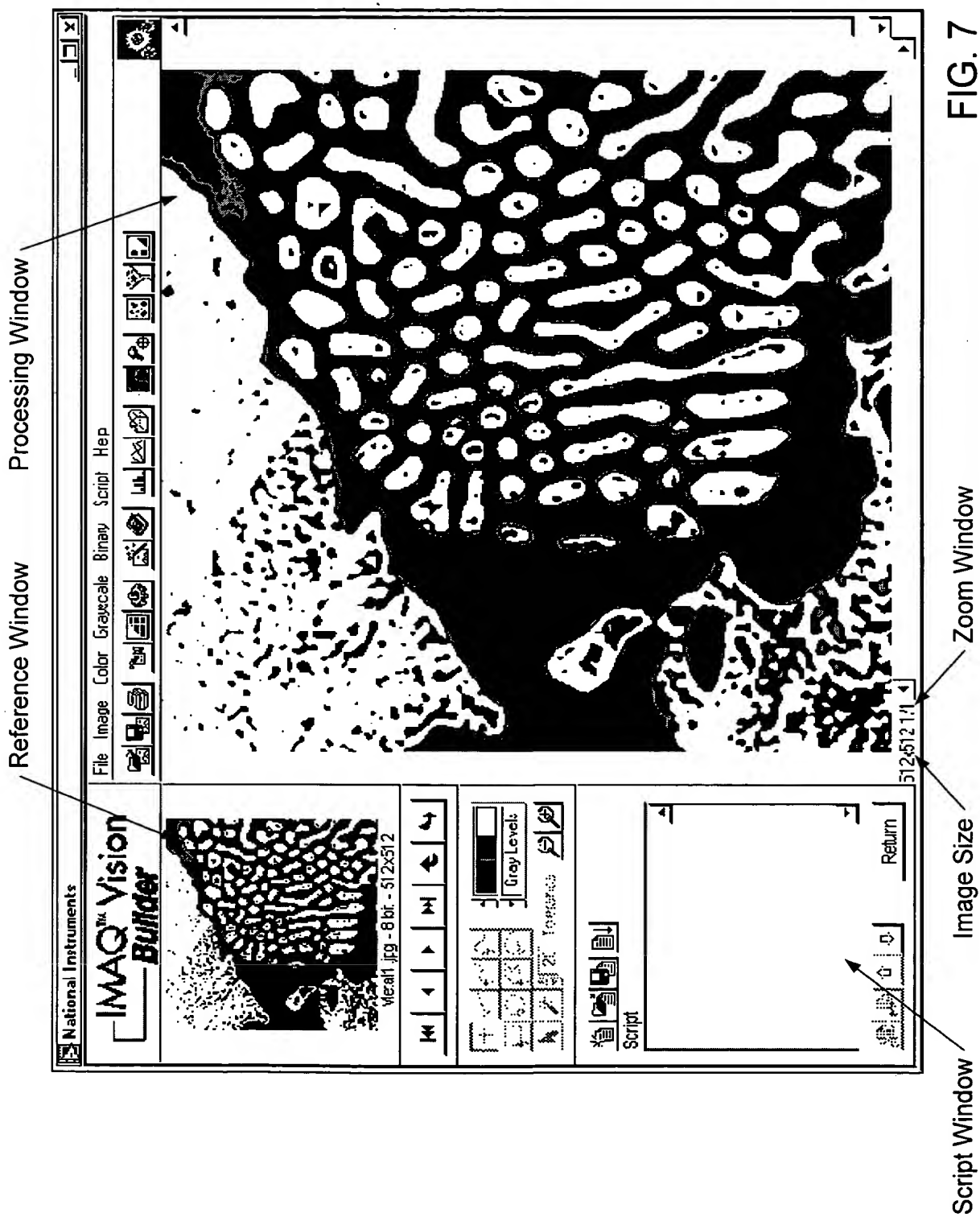


FIG. 7



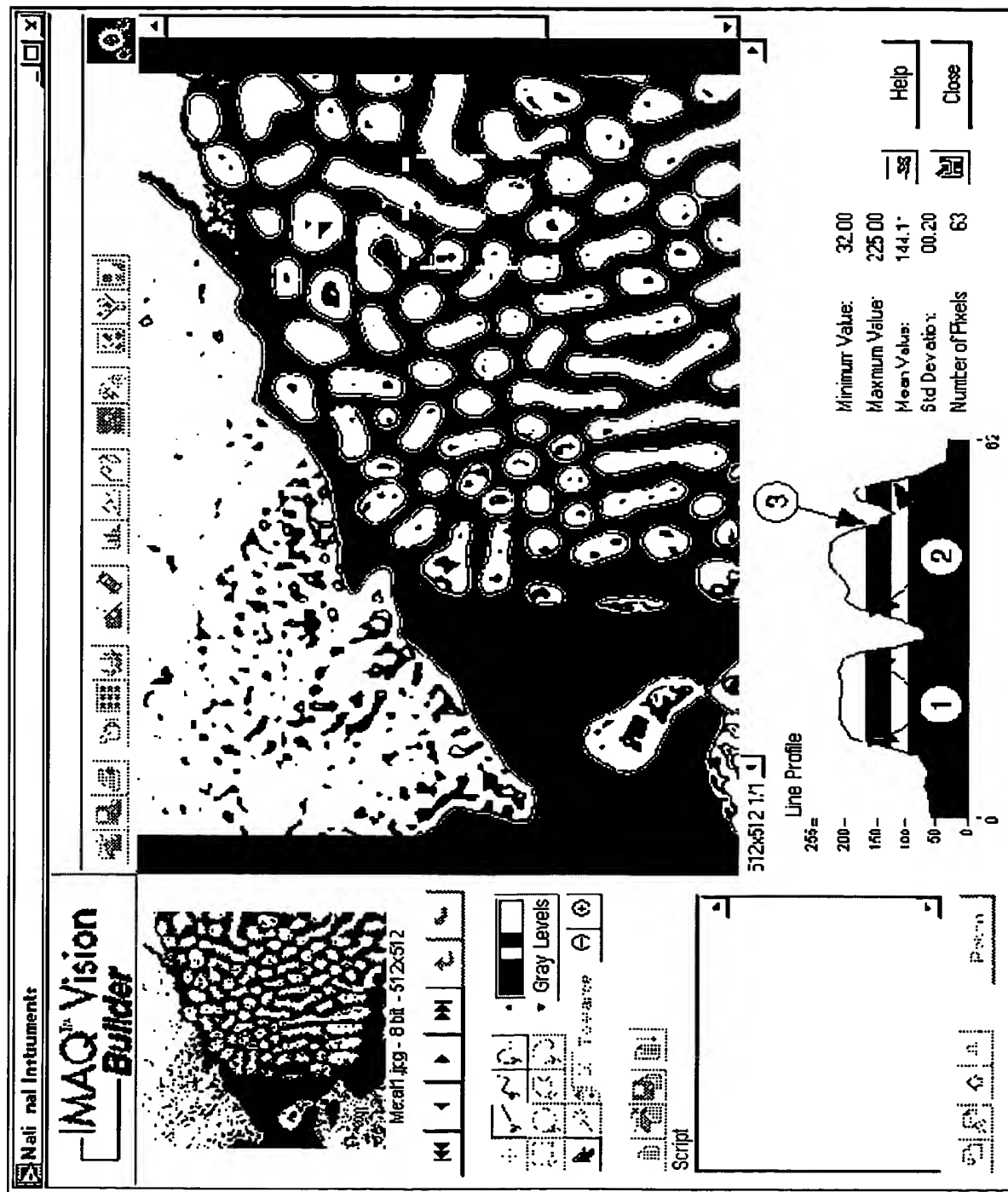


FIG. 8



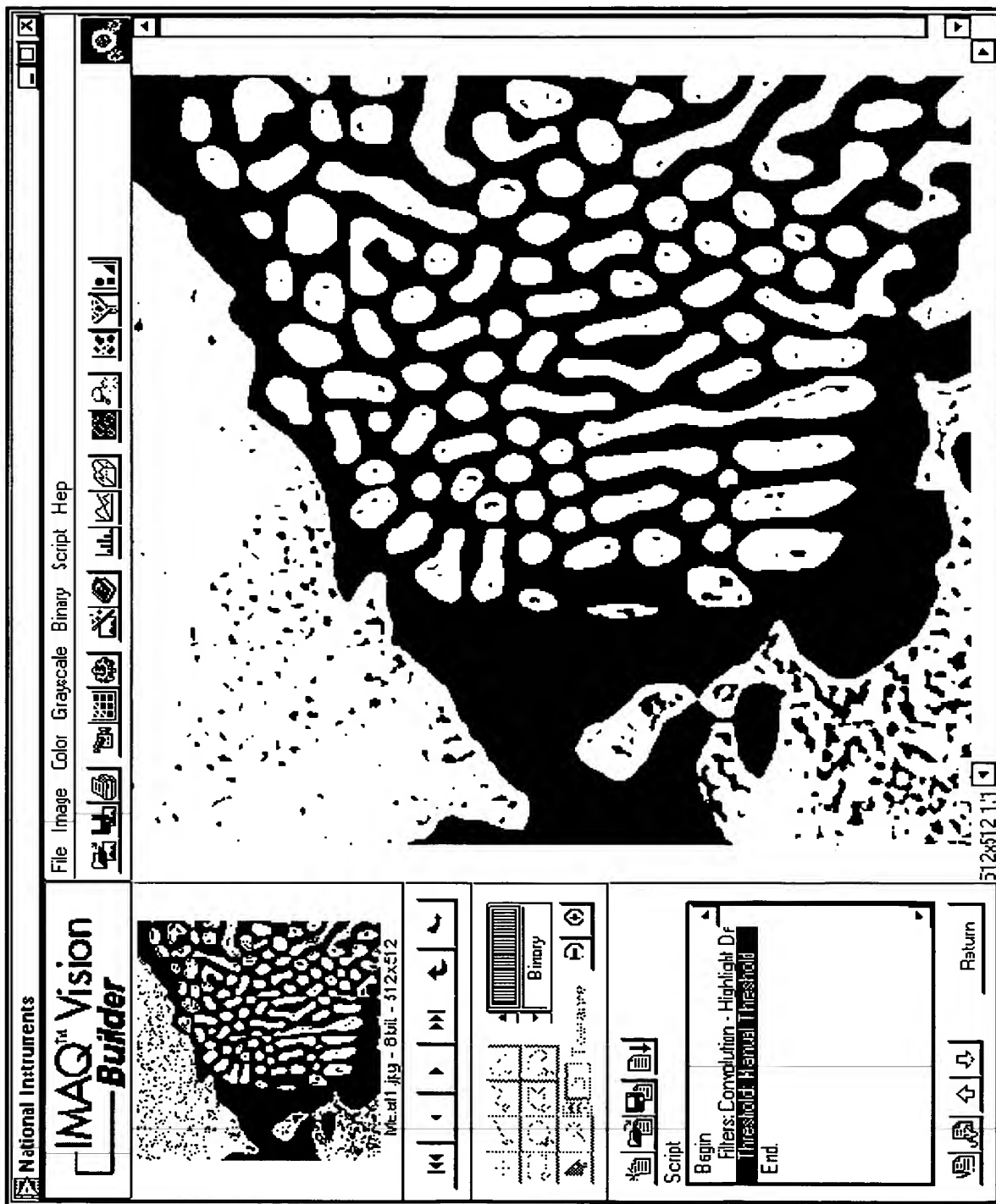


FIG. 10

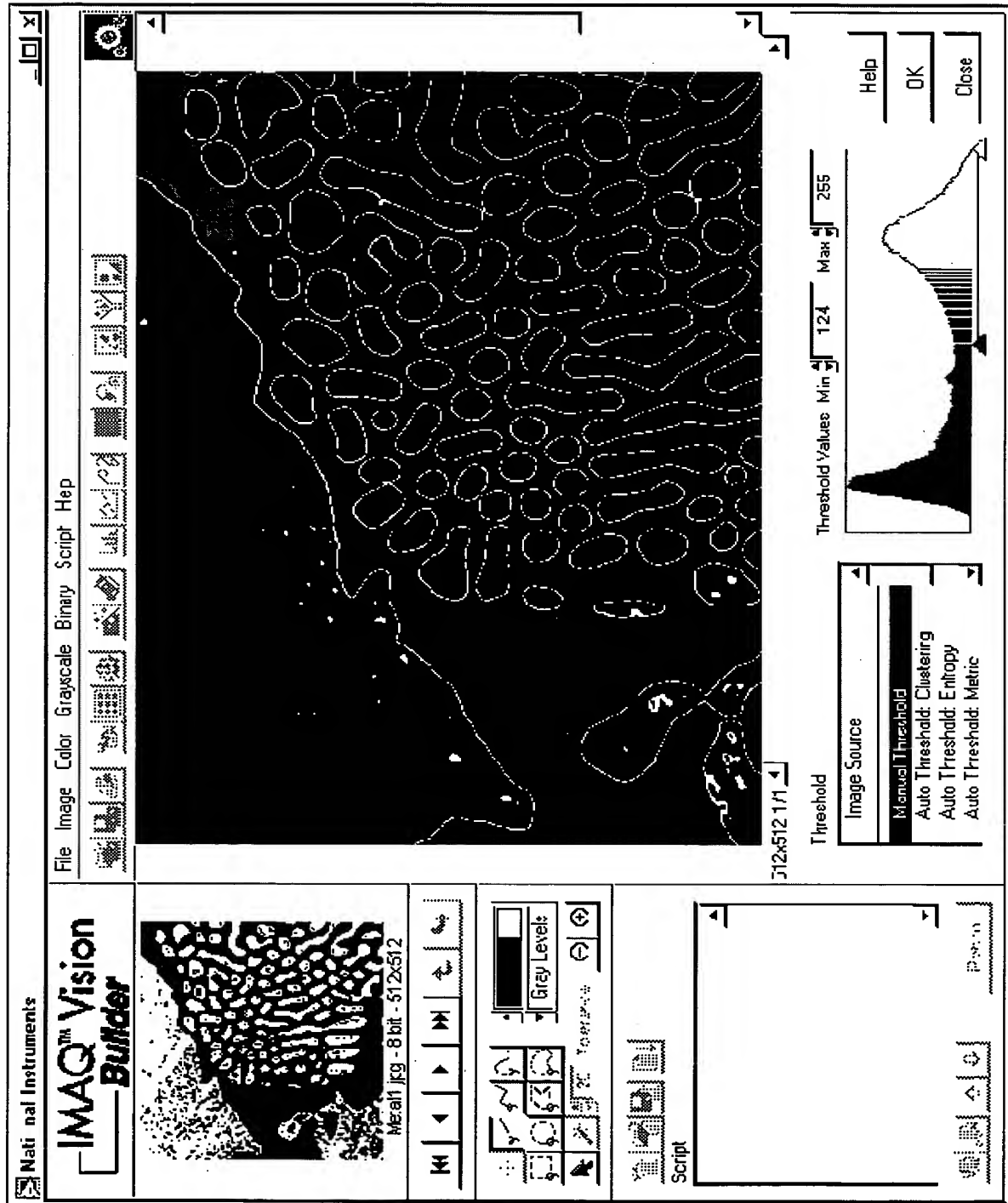


FIG. 11

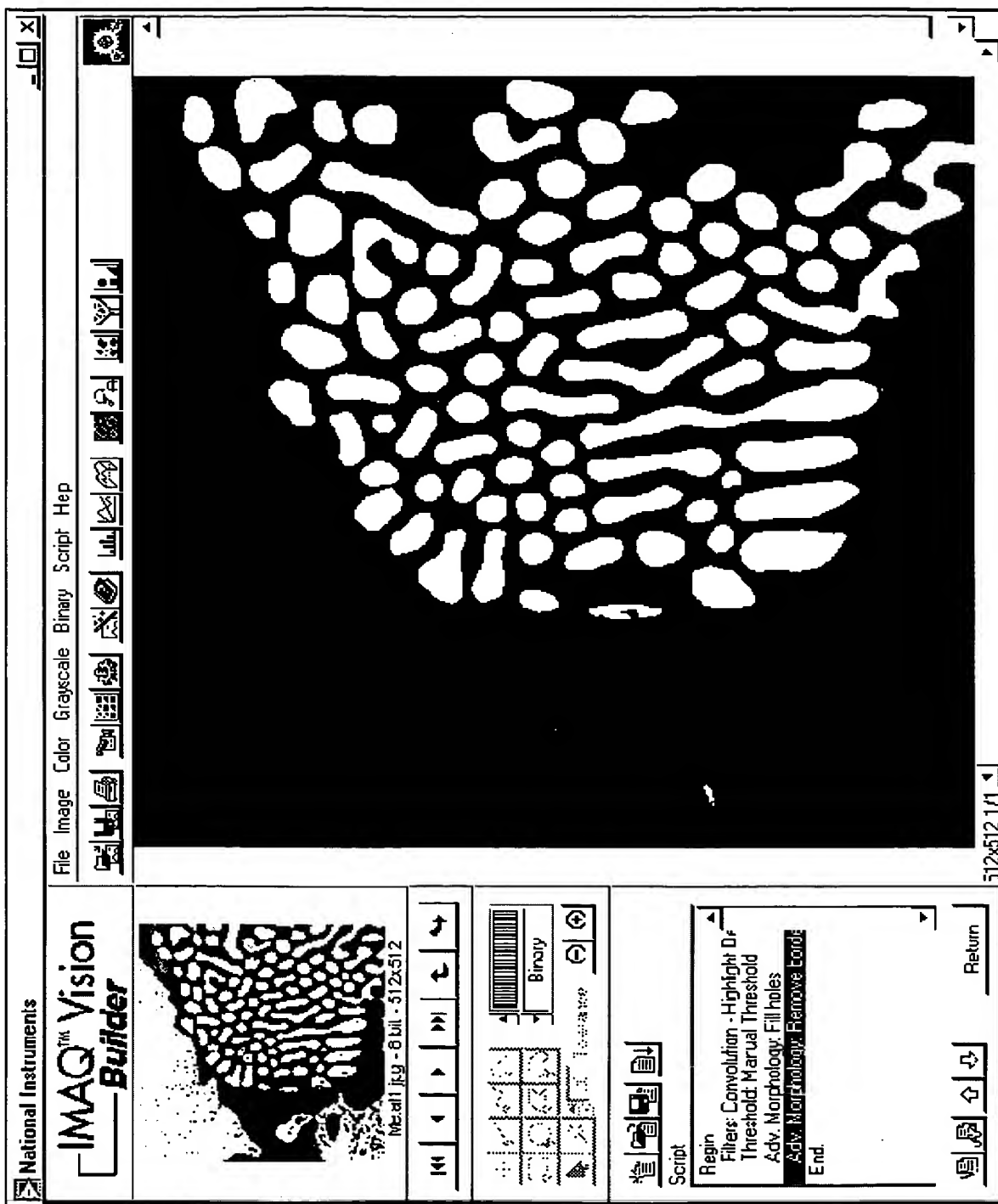


FIG. 12

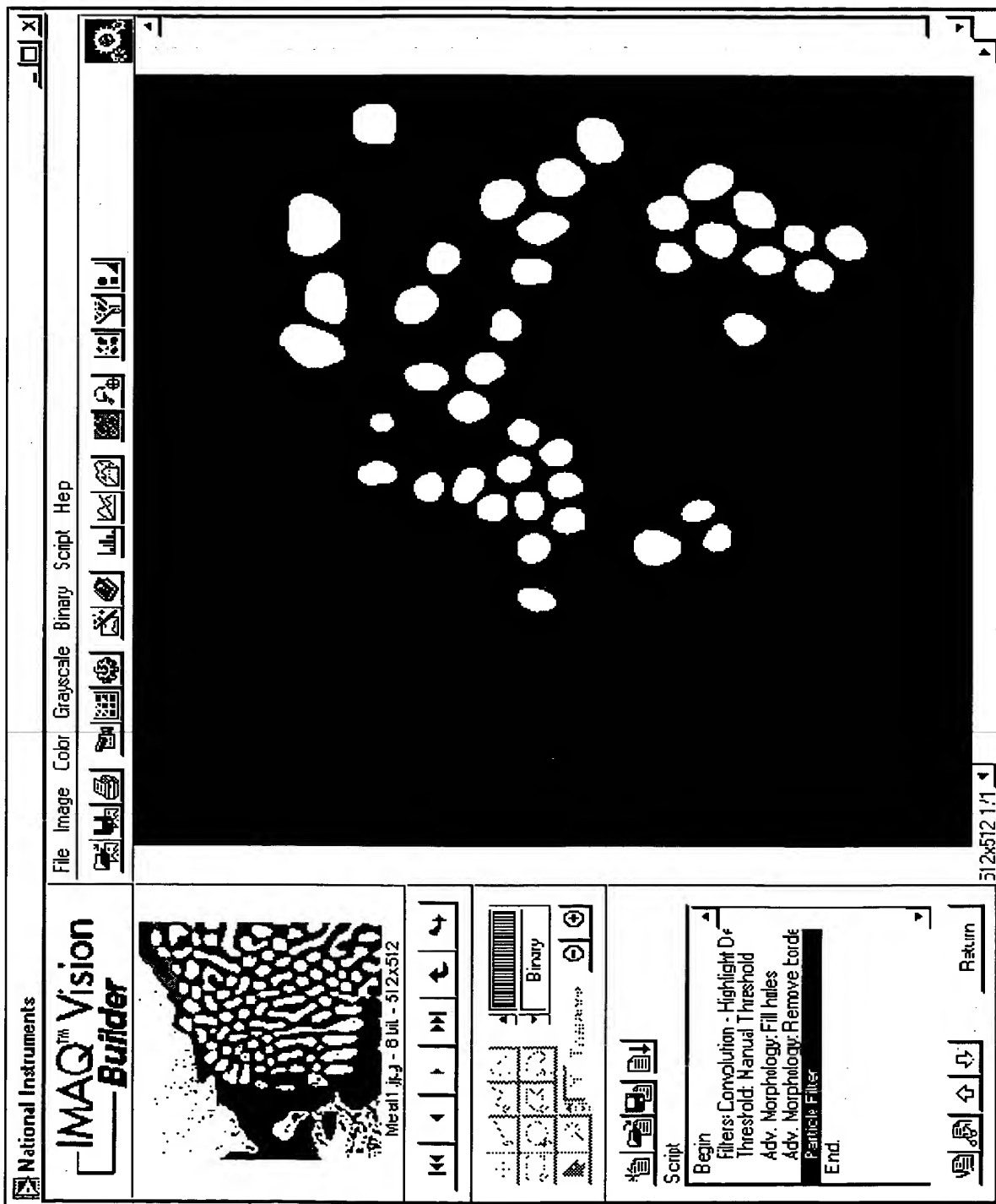


FIG. 13

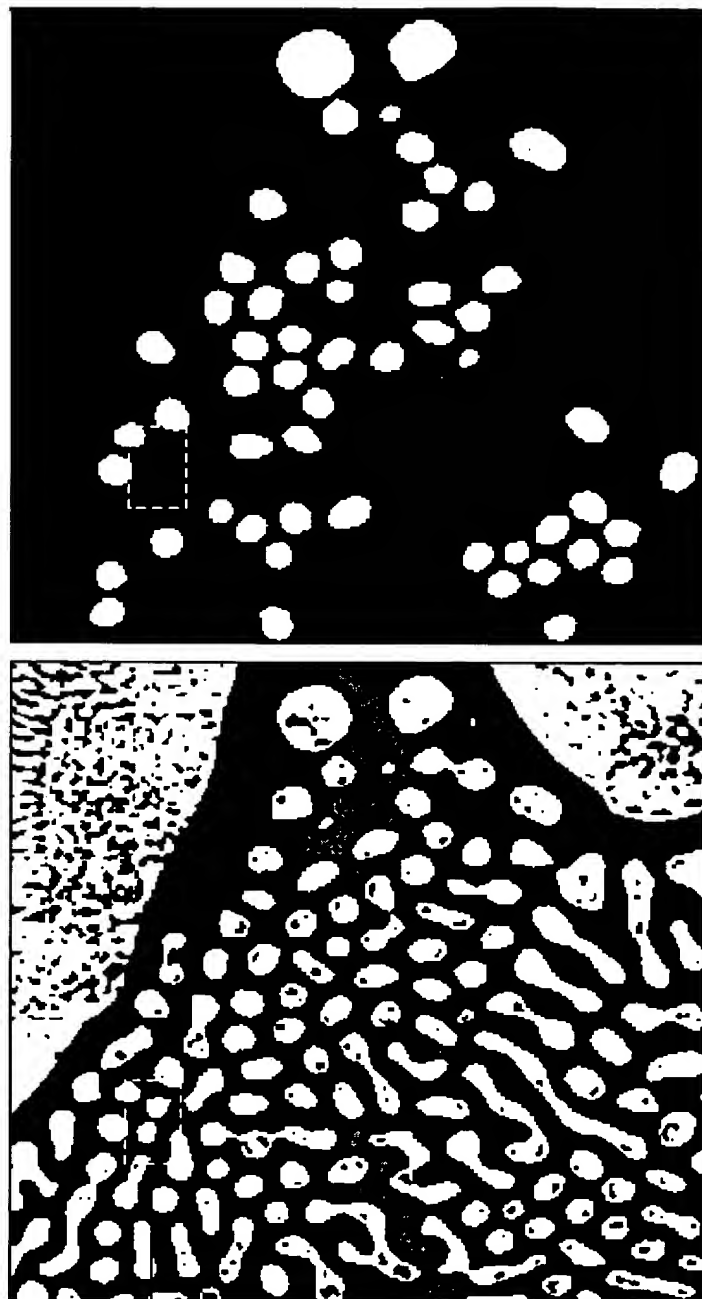


FIG. 14

Image after Processing

Original Image (Metal3.jpg)

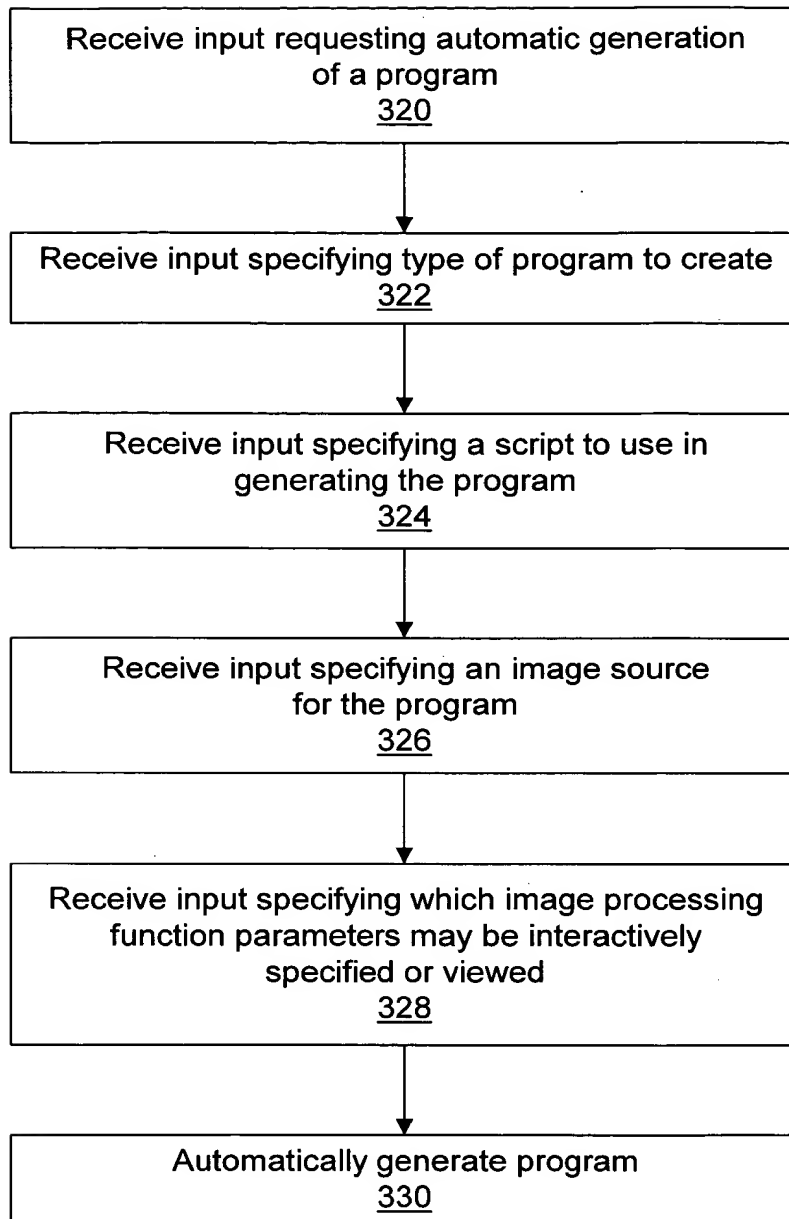


FIG. 15



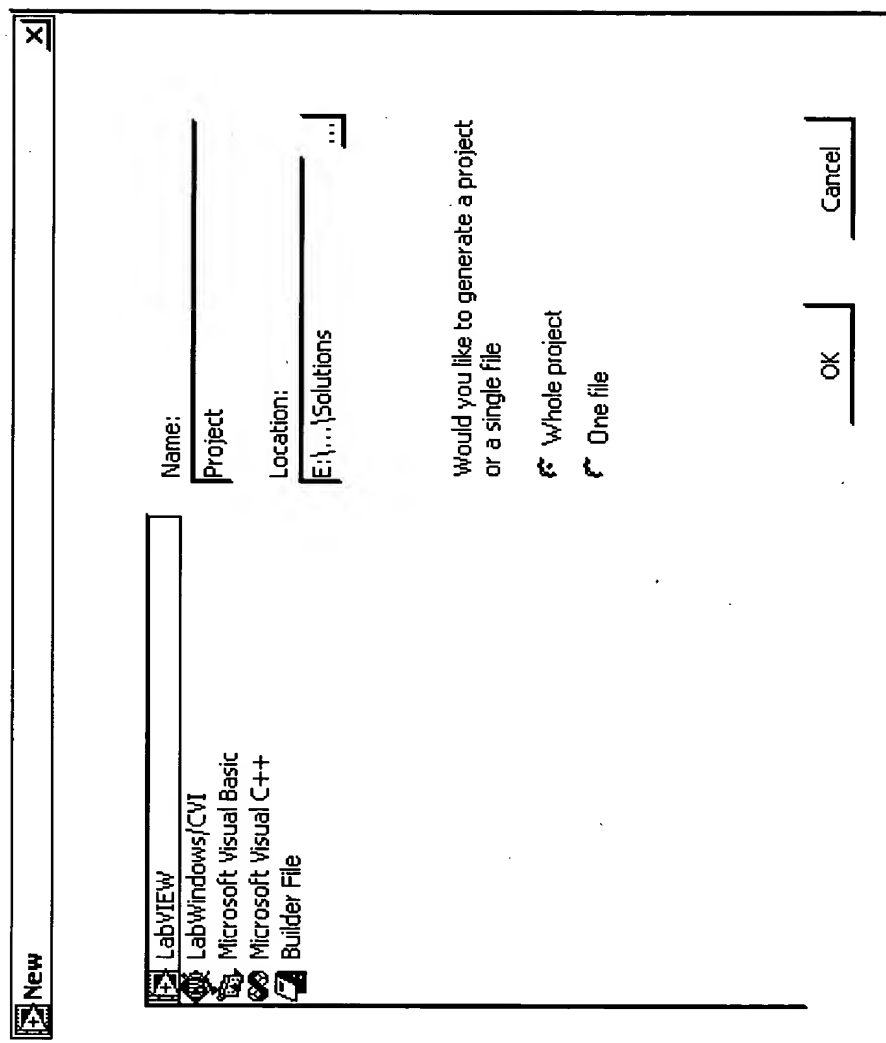


FIG. 16

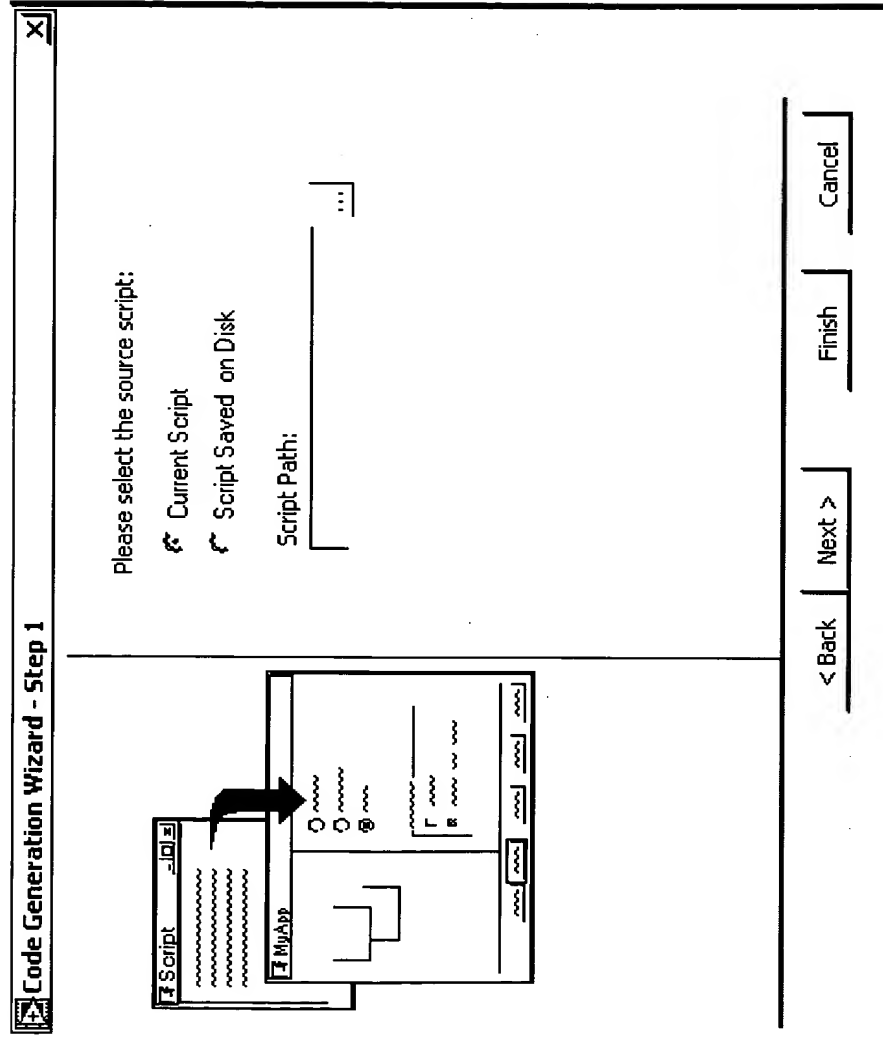


FIG. 17

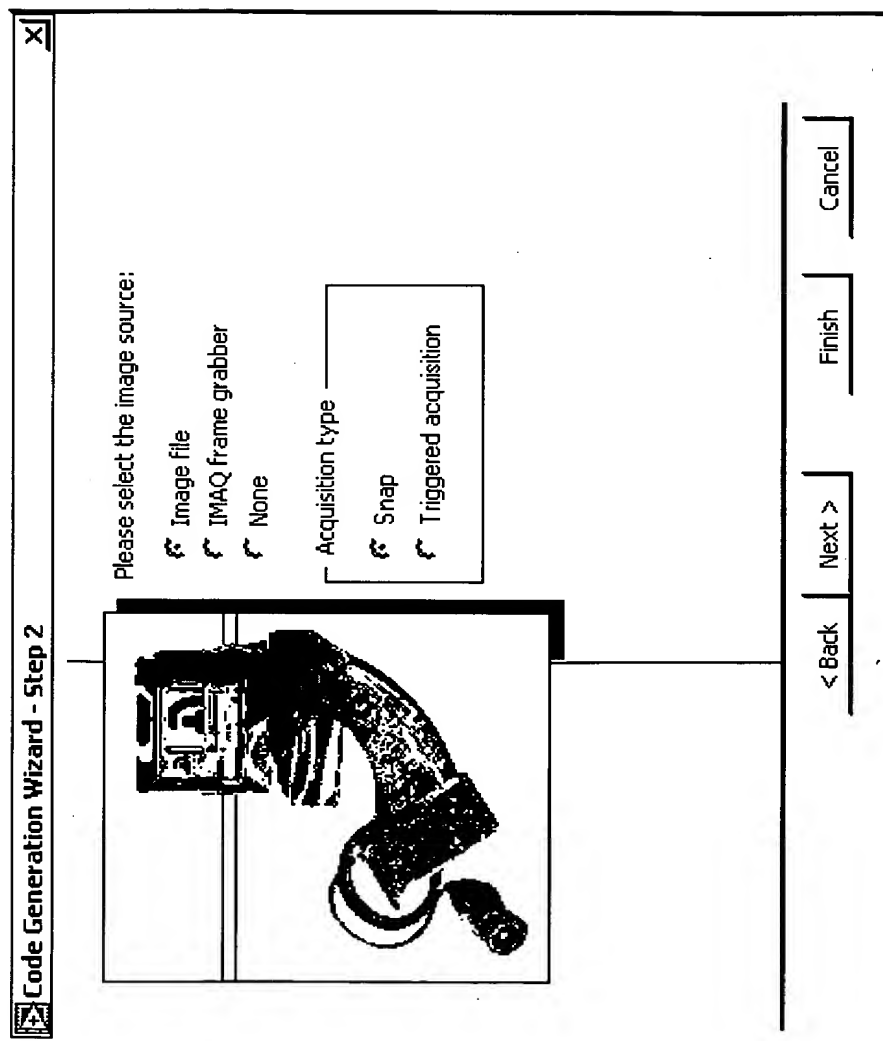


FIG. 18

Code Generation Wizard - Step 3

X

Please select which parameter you want to be editable or hardcoded

Inputs

Step 1

☒

Image Src

☐

Kernel

☐

Step 2

☒

Range

☐

Step 3

☐

Step 4

☐

Step 5

☐

Keep Particles

☐

Selection Values

Outputs

Step 5

☒

Complex Reports

☒

Number of particles

The parameters that are checked will be shown on the Front Panel for editing or viewing.

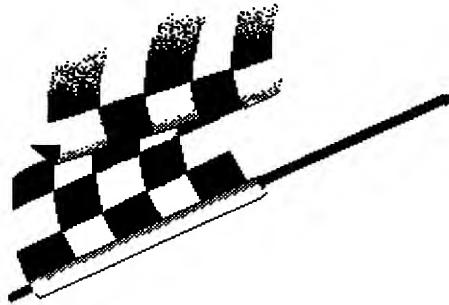
< Back

Next >

Finish

Cancel

FIG. 19



Code Generation Wizard - Step 4

X

IVB Wizard creates the following files for you:

File name:

Summary

< Back

Next >

Finish

Cancel

FIG. 20

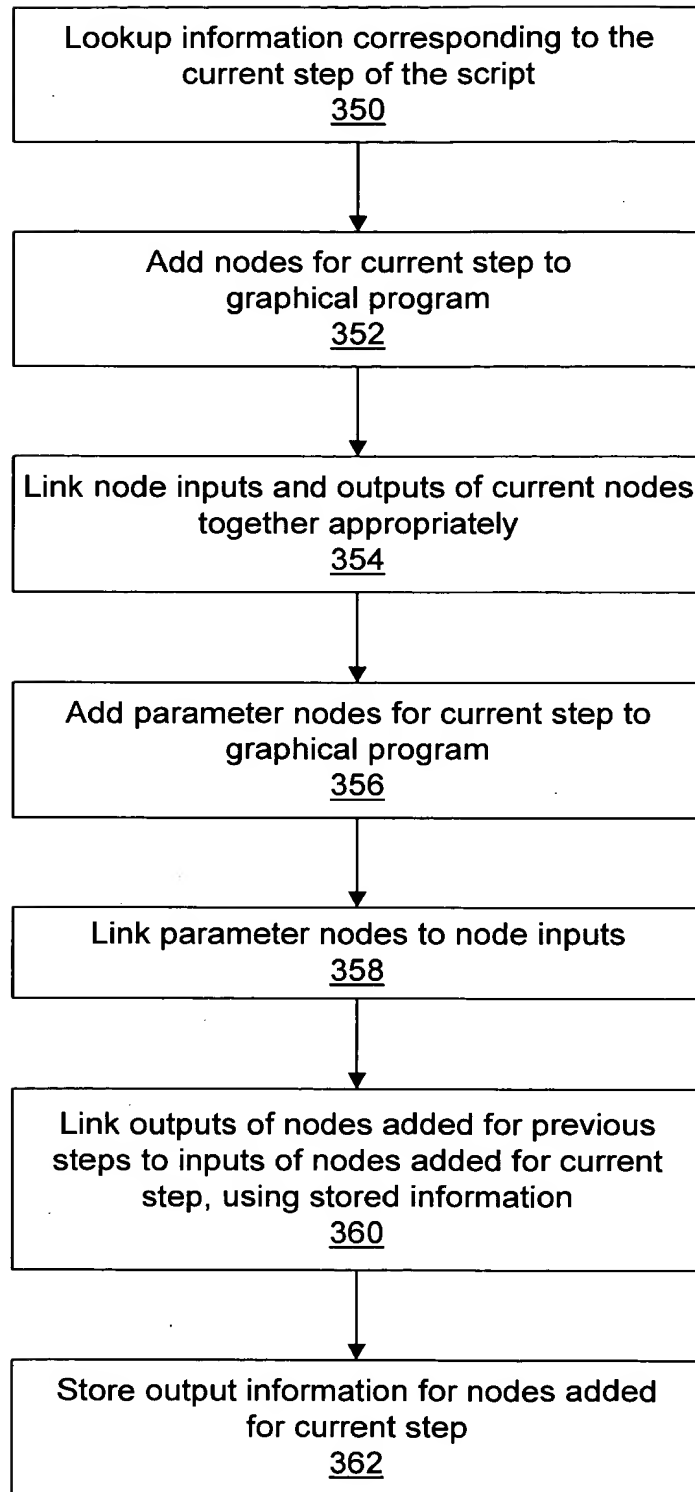


FIG. 21

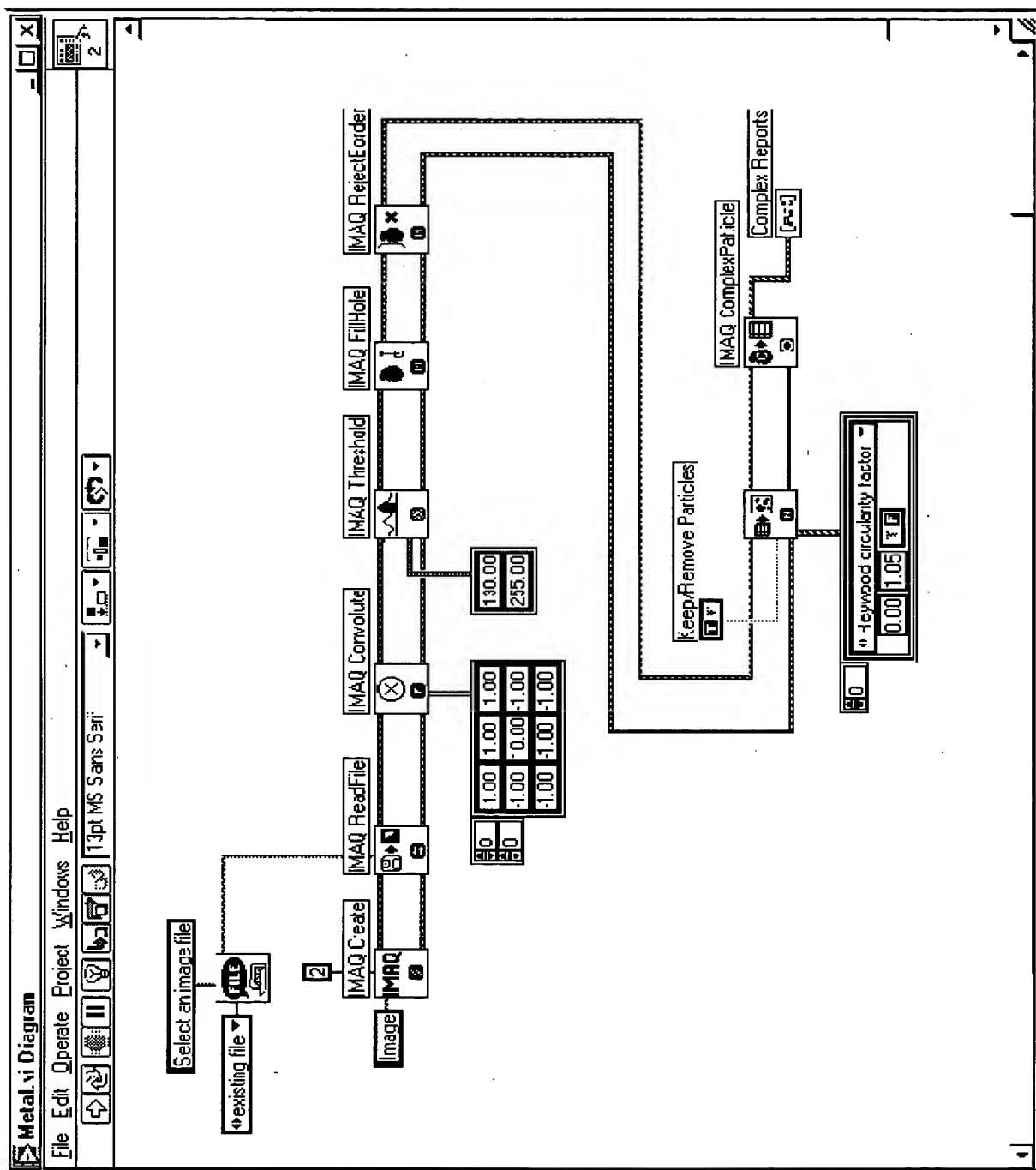


FIG. 22

IVB Tutorial Sample.vi

File Edit Operate Tools Browse Window Help

13pt Application Font

Complex Reports

Area (pixels)  
b

Area (calibrated)  
b.00

Perimeter  
b.00

Number of Holes  
b

Hole's Area (pixels)  
b

Hole's Perimeter  
b.00

Global Rectangle

x1Left  
b

y1Top  
b

x2Right  
b

y2Bottom  
b

$\Sigma x$   
b.00

$\Sigma y$   
b.00

$\Sigma xx$   
b.00

$\Sigma xy$   
b.00

$\Sigma yy$   
b.00

Longest Segment  
b

Longest Coordinates Segment  
b

$x$   
b

$y$   
b

Projection x  
b

Projection y  
b

Image Src

Range

Lower value  
120.00

Upper value  
255.00

Number of Particles  
b

Beta

FIG. 23



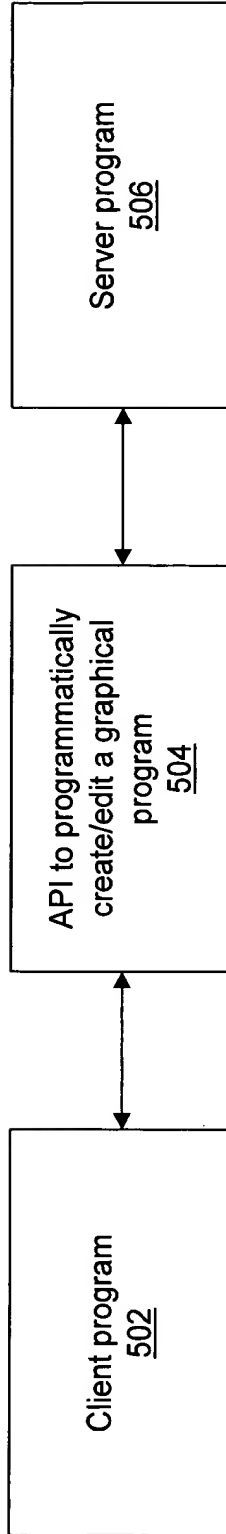


FIG. 24

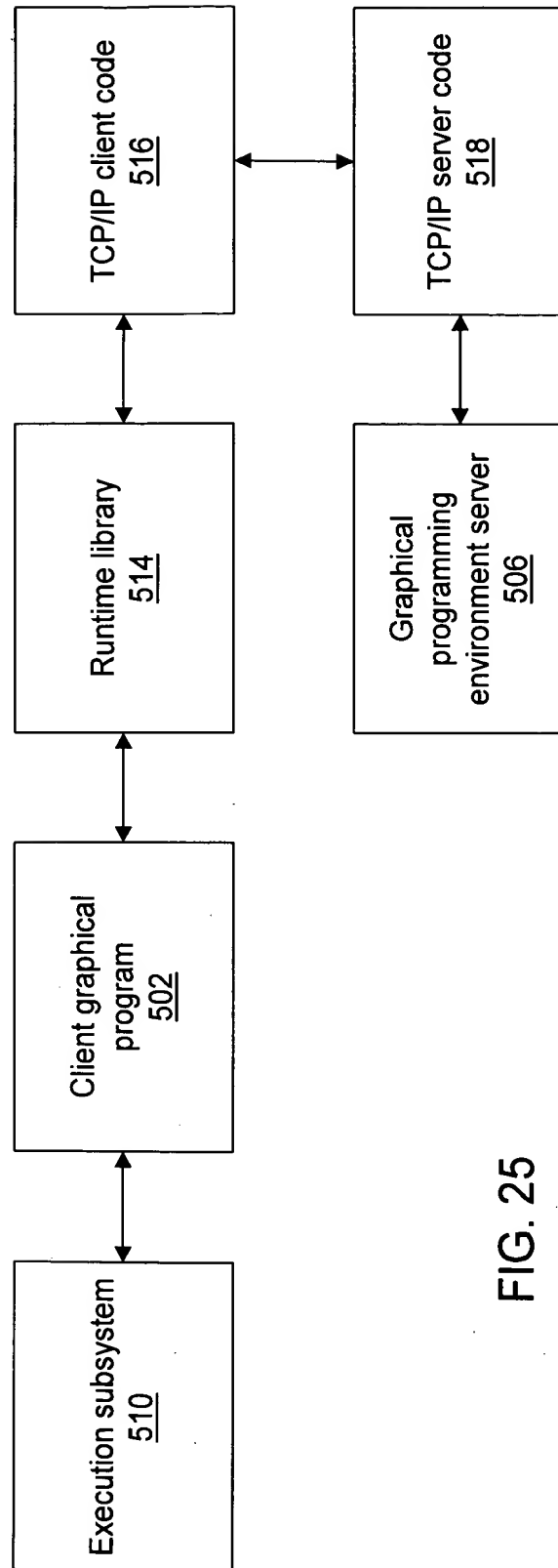


FIG. 25

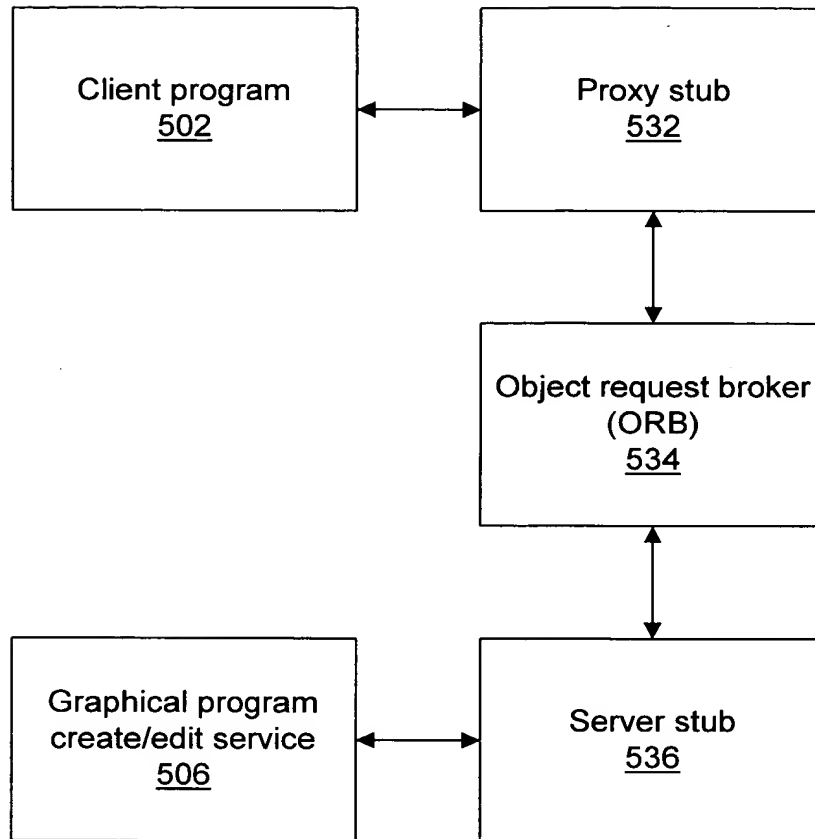


FIG. 26

## Open Application Reference Node

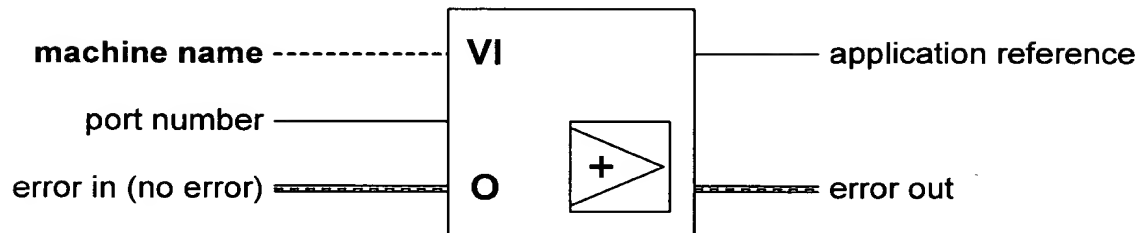


FIG. 27

## Open VI Reference Node

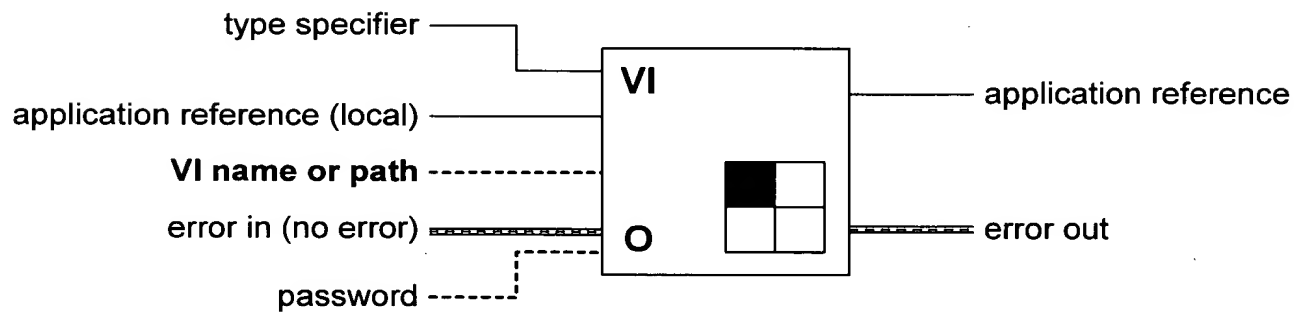


FIG. 28

## New VI Reference Node

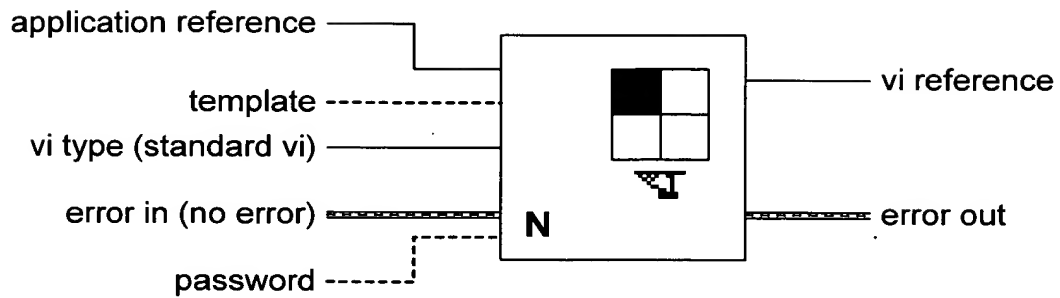


FIG. 29

## Open VI Object Reference Node

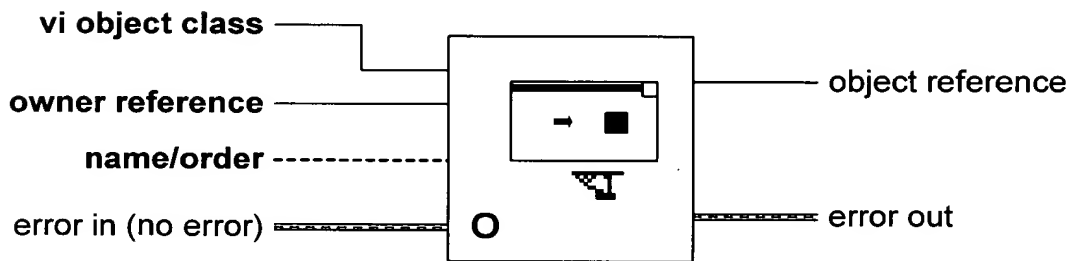


FIG. 30

New VI Object Reference Node

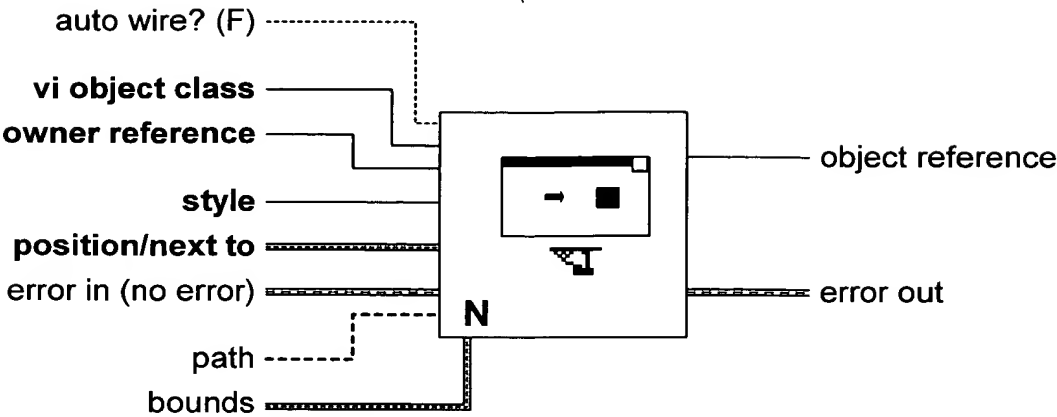


FIG. 31

Upcast Reference Node

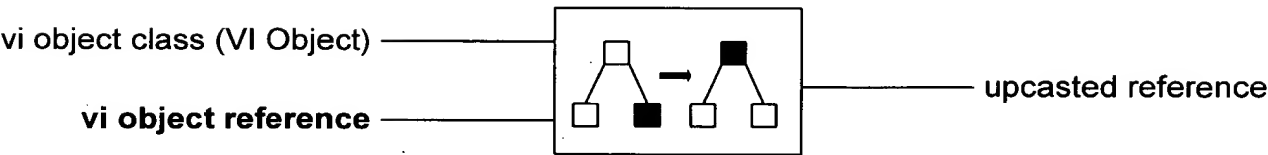


FIG. 32

## Downcast Reference Node

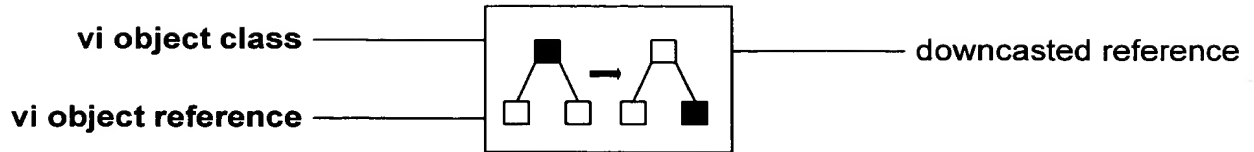


FIG. 33

## Close Application or VI Reference Node

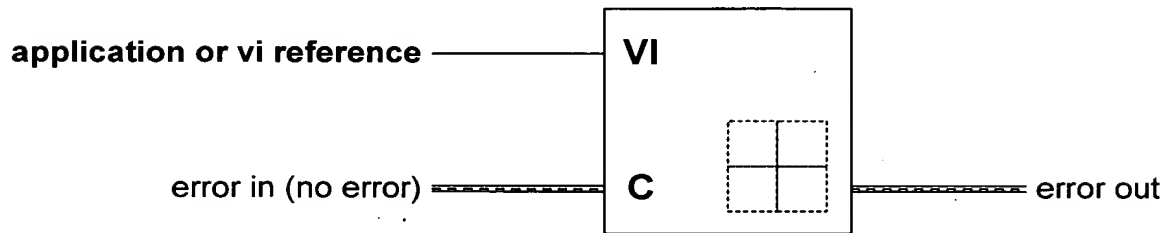


FIG. 34

## Call By Reference Node

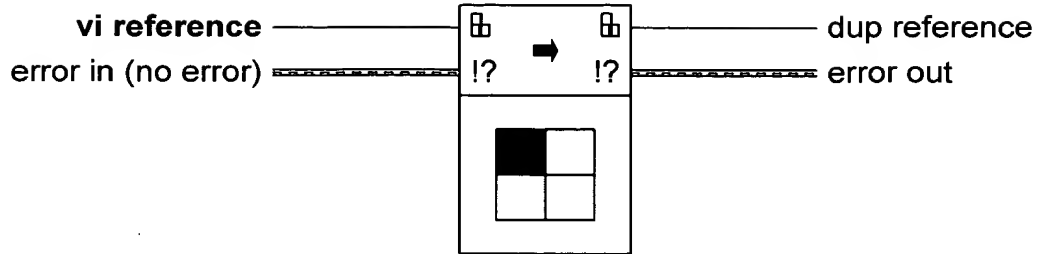


FIG. 35

## Property Node

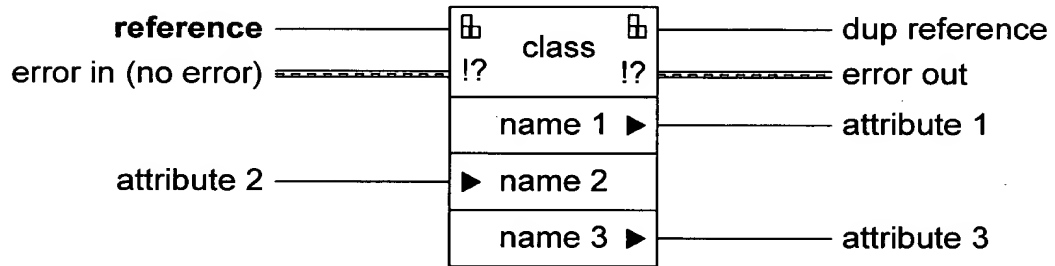


FIG. 36

## Invoke Node

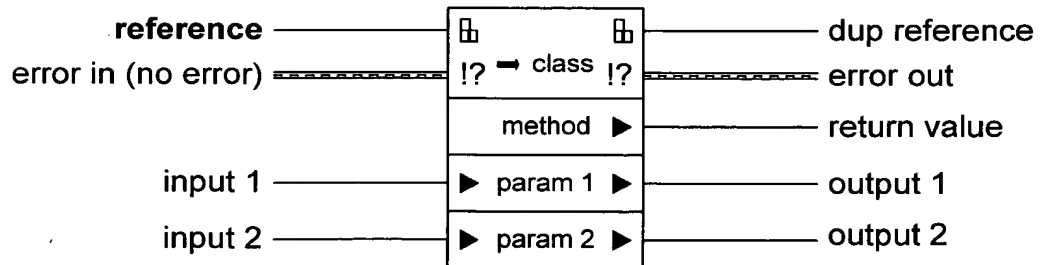


FIG. 37



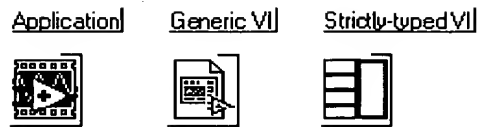


FIG. 38

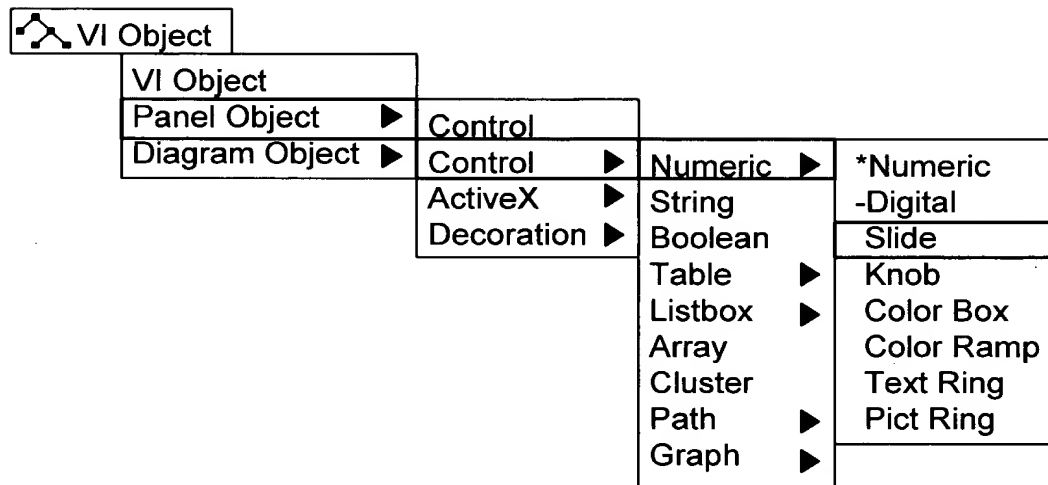


FIG. 39

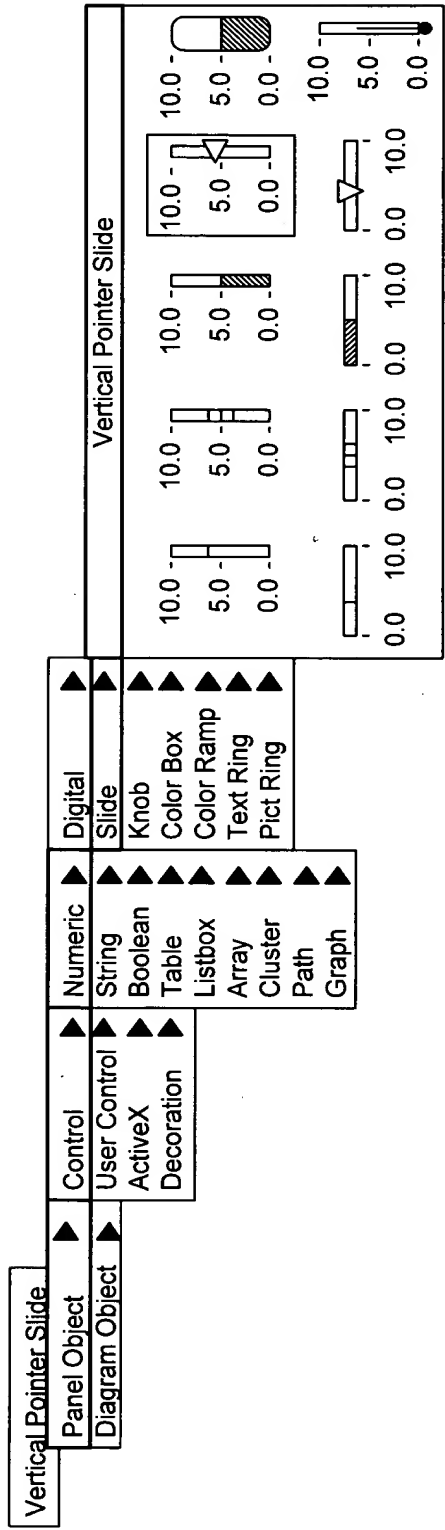


FIG. 40

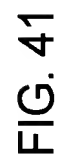
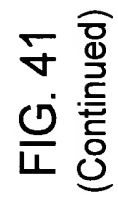
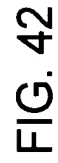


FIG. 41







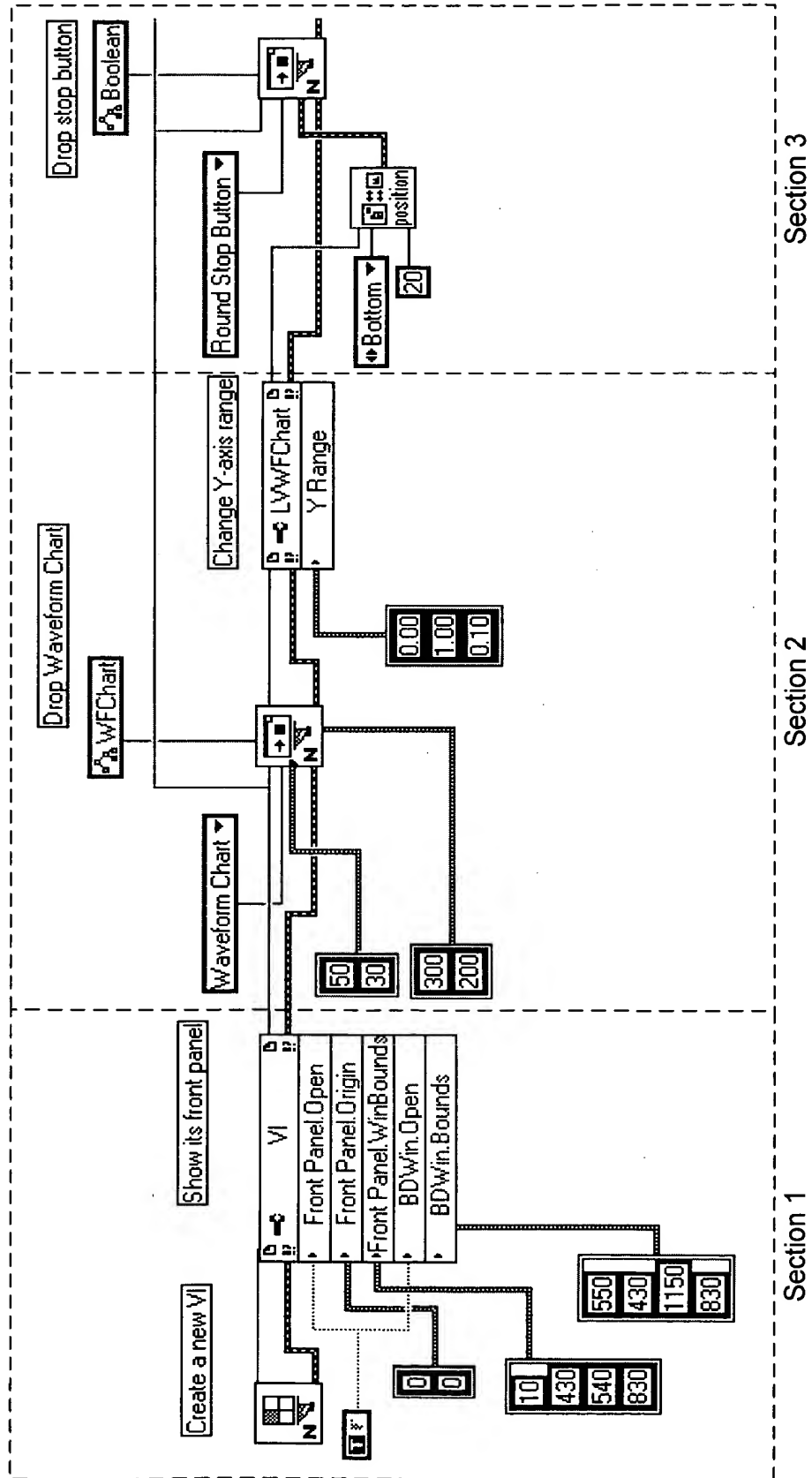


FIG. 44A





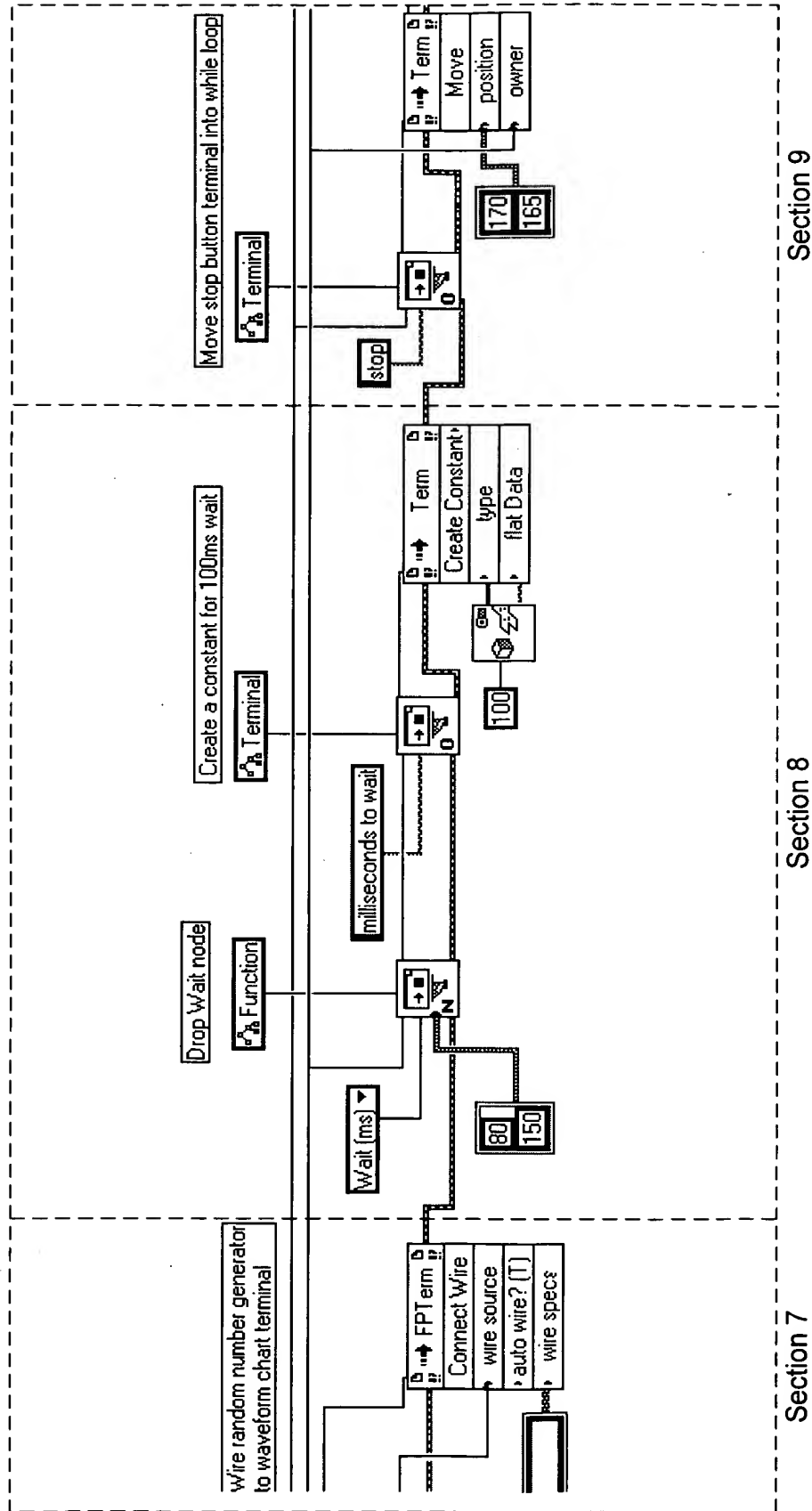


FIG. 44B

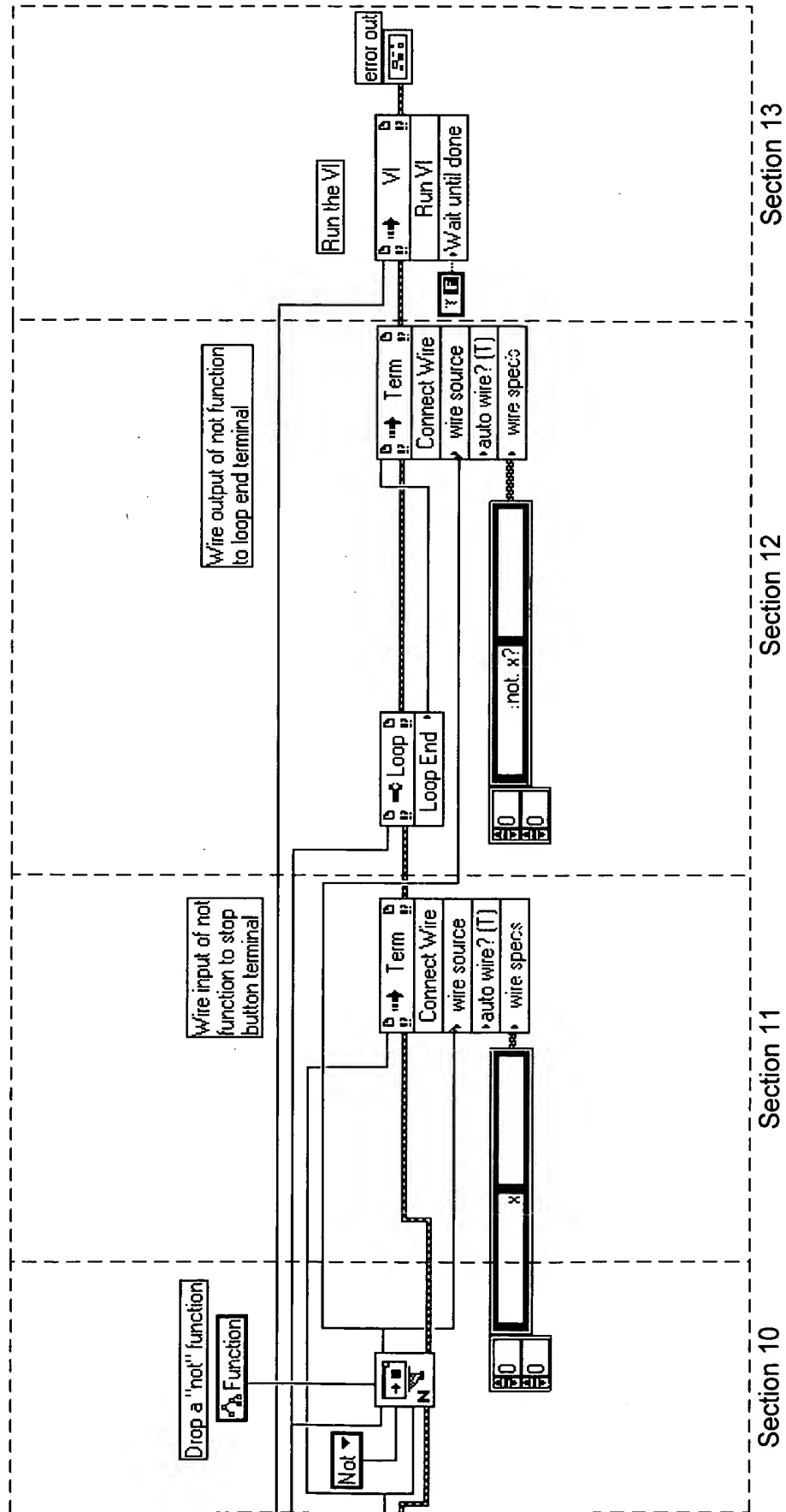
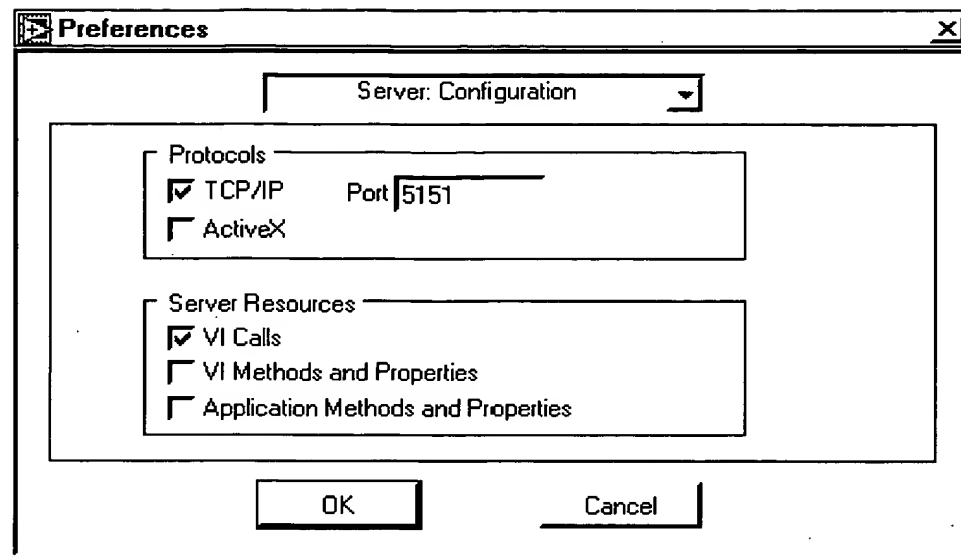


FIG. 44B  
(Continued)

## Server Configuration

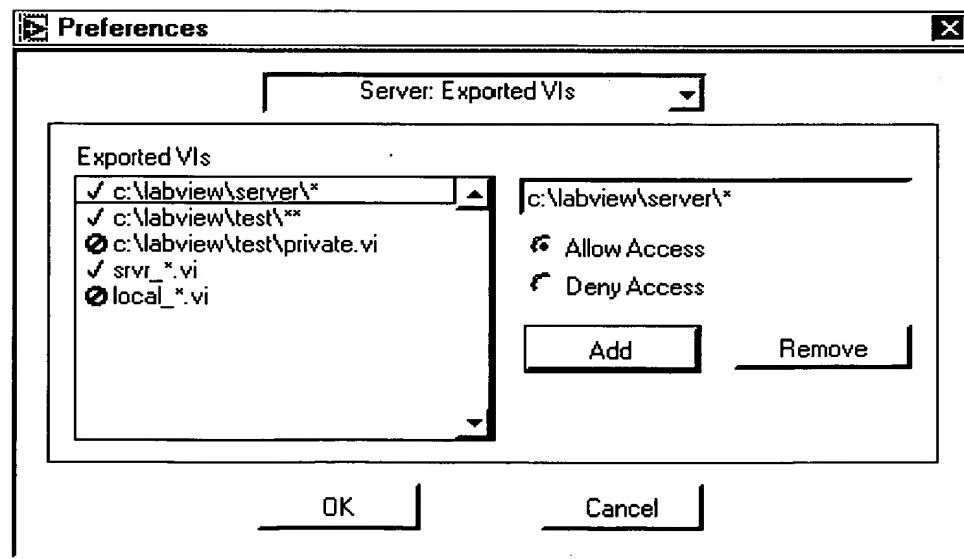


The 'Server Configuration' dialog box is titled 'Preferences' and has a dropdown menu set to 'Server: Configuration'. It contains two main sections: 'Protocols' and 'Server Resources'. In the 'Protocols' section, 'TCP/IP' is checked and 'ActiveX' is unchecked; the 'Port' is set to 5151. In the 'Server Resources' section, 'VI Calls' is checked, while 'VI Methods and Properties' and 'Application Methods and Properties' are unchecked. At the bottom are 'OK' and 'Cancel' buttons.

Section	Item	Status
Protocols	TCP/IP	Checked
	ActiveX	Unchecked
Server Resources	VI Calls	Checked
	VI Methods and Properties	Unchecked
	Application Methods and Properties	Unchecked

FIG. 45

## Exported VIs Configuration



The 'Exported VIs Configuration' dialog box is titled 'Preferences' and has a dropdown menu set to 'Server: Exported VIs'. It features a list of 'Exported VIs' on the left, a text field for the path on the right, and radio buttons for 'Allow Access' and 'Deny Access'. 'Add' and 'Remove' buttons are located below the radio buttons. At the bottom are 'OK' and 'Cancel' buttons.

Exported VIs	Path	Access
✓ c:\labview\server\*	c:\labview\server\*	Allow Access
✓ c:\labview\test\**		
⊗ c:\labview\test\private.vi		
✓ svr_*.vi		
⊗ local_*.vi		

FIG. 46

## TCP/IP Access Configuration

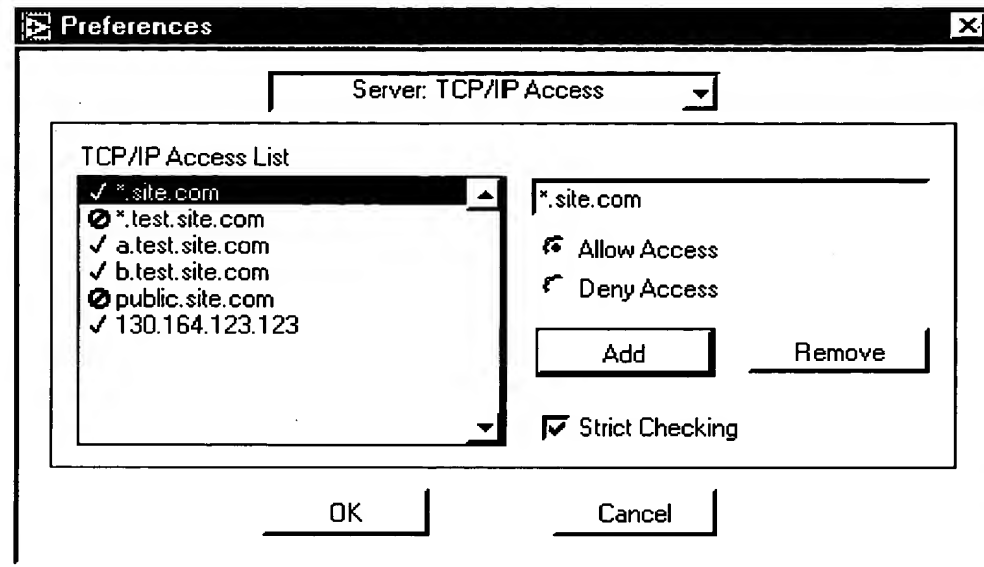


FIG. 47

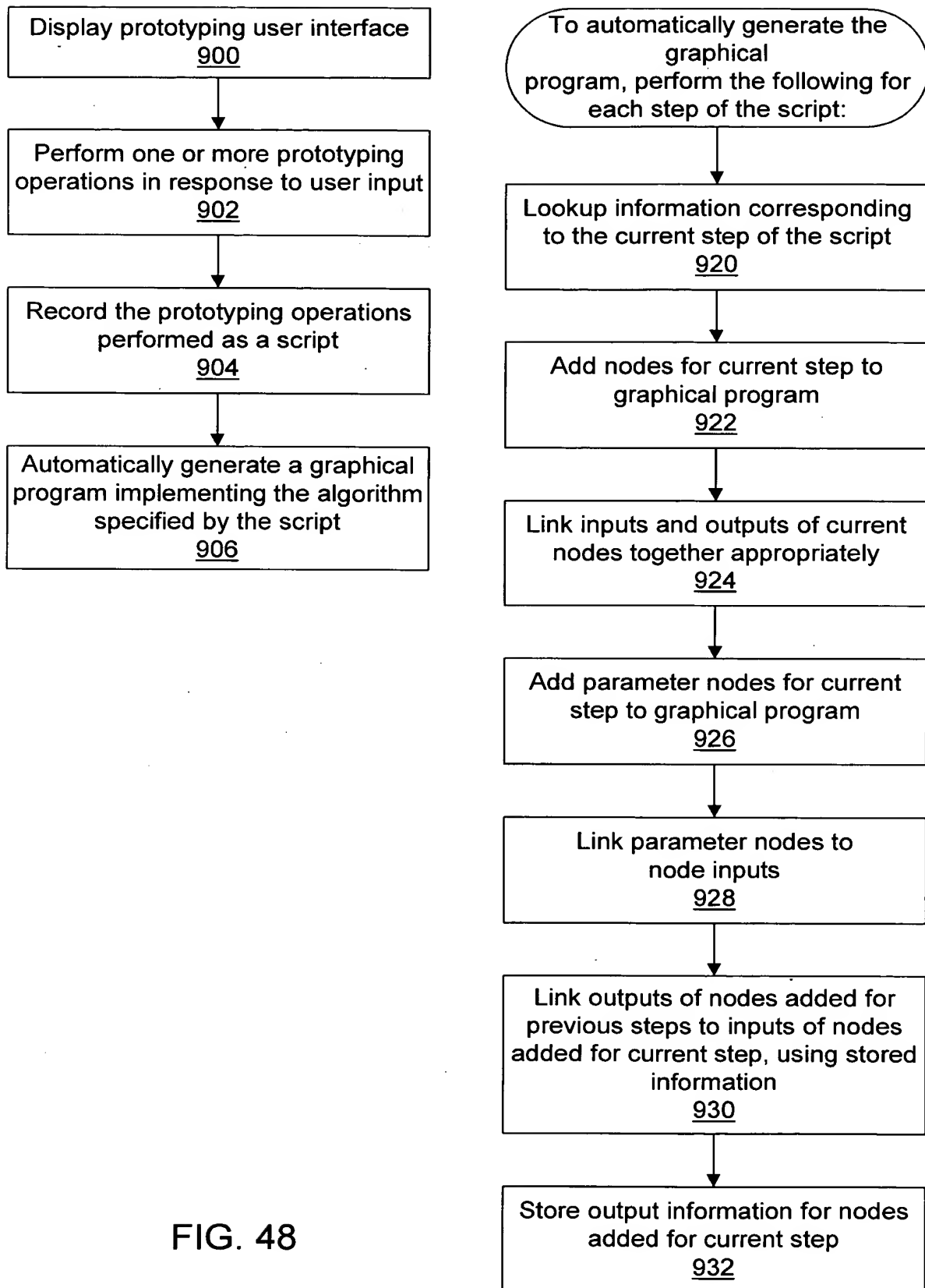


FIG. 48